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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/423,746	11/15/1999	NILO FAGIOLINI	32232-152197	7109

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EXAMINER

VANOY, TIMOTHY C

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 12/12/2001

Please find below and/or attached an Office communication concerning this application or proceeding..

Office Action Summary

Application No.

09-423,746

Applicant(s)

FAGIOLINI

Examiner

VANDY

Group Art Unit

1754

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on

THE AMENDMENT DATED NOV. 2, 2001

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-10 AND 12 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-10 AND 12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received
in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

DETAILED ACTION

Continued Prosecution Application

The Request mailed Nov. 19, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09-423,746 is acceptable and a CPA has been established. An action on the CPA follows.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a) Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the Inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 12 is limited to: "wherein said composition is devoid of silica *which interferes with said purification*", however pg. 4 lns. 7-13 sets forth that the phrase "substantially devoid of silica" is understood to mean that the amount of silica in the reactive composition *is insufficient to have a perceptible influence on the caking of the*

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sodium bicarbonate (emphasis added in italics)– hence this limitation of claim 12 does not appear to be supported by pg. 4 lns. 7-13 in the Applicants' specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The person having "ordinary skill in the art" has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim

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that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent Doc. No. DE 41 00 645 A1 to Regler et al.

The English abstract of the Regler et al. application discloses a method for removing sulfur dioxide and hydrogen chloride out of a gas by contacting the gas with a reagent comprising:

- (1) what appears to be at least one component to include NaHCO_3 ; MgO , $\text{Mg}(\text{OH})_2$, etc. . . , and (optionally)
- (2) an activated charcoal or coke (especially lignite), so that (evidently) the reagent reacts with the sulfur dioxide and hydrogen chloride in the gas to produce a cleaned gas and reaction products, and then (evidently) the reaction products are filtered out of the gas.

The difference between the Applicants' claims and the Regler et al. application is that the Applicants' claims call for using a combination of the sodium bicarbonate and the magnesium compound (whereas, evidently, Regler et al. sets forth the use of a plurality of reagents with the same sodium bicarbonate and magnesium compound being among them), however it is submitted that this difference would have been obvious to one of ordinary skill in the art at the time the invention was made because the recitation of the same species in the Markush grouping of species in the English

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abstract of the Regler et al. application renders obvious the use of any combination of the recited species for the same purpose taught in the Regler et al. application.

The limitations of Applicants' claim 1: "... being devoid of silica. . ." and in claim 12: "... said composition is devoid of silica which interferes with said purification. . ." are noted but are submitted to be obvious from the Example and also claim 1 of the English translation of DE 41 00 645 A1 which do not require or mention the presence of any of the "surface active substances" mentioned on pg. 4, 4th full paragraph in the English translation of DE 41 00 645 A1 (i. e. activated charcoal, activated coke, for example, brown coal-hearth furnace coke, activated aluminum oxide, silica gel, kieselguhr and/or zeolites). Since neither the independent claim 1 or Example in the English translation of DE 41 00 645 A1 require, mention or suggest the presence of silica in the composition then claim limitations requiring the absence of silica are submitted to be obvious from DE 41 00 645 A1.

Response to Arguments

Applicants' arguments submitted in their Amendment dated Mar. 19, 2001, which has been filed as paper no. 8, have been fully considered but they are not persuasive.

a) *The Applicants argue their invention is intended to solve an agglutination problem, whereas Regler (i. e. DE 41 00 645 A1) does not mention or suggest an agglutination problem.*

There is no requirement that DE 41 00 645 A1 must recognize any undisclosed deficiencies or provide any undisclosed additional advantages of at least an obvious

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variation of the same claimed process and same claimed composition in order for a case of prima facie obviousness to be established: please see section section 2145(II) in the MPEP (Rev. 1, Feb. 2000) for additional details.

b) *The Applicants argue that in order to reconstruct Applicants' invention from DE 41 00 645, one skilled in the art must operate selective selections.*

It appears that the Applicants are arguing that there is no motivation to make the selection of the particular species (set forth in the Applicants' claims) out of the plurality of species disclosed in the Markush-type groups in DE 41 00 645 A1, but this type of argument was not found persuasive in the decision reached in the *In re Petering*, 301 F.2d 676, 681, 133 USPQ 275, 280 court decision where it was determined that the selection of a particular species out of a group of 20 species was obvious because "one skilled in [the] art would . . . envisage each member" of the genus: please see the discussion of this court decision set forth in section 2144.08 (II) (A) (4) (a) in the MPEP (Rev. 1, Feb. 2000), particularly pg. 2100-112 for further details.

c) *The Applicants argue that the Regler composition contains silica, whereas the Applicants have discovered the negative effects of silica for the agglutination problem. The Applicants' claim recites that the composition is substantially devoid of silica.*

The amount of "surface active agent" (which may be silica: please also see pg. 4, 4th full paragraph in the English translation of DE 41 00 645 A1) ranges from 0.1 to 95% which embraces the "0.48%" of silica of Applicants' Example 1 and "less than 0.48%" silica limitation of Applicants' claim 11. To the same degree that the Applicants' composition is "substantially devoid" of silica, so is the composition of DE 41 00 645 A1.

The Applicants' arguments submitted in their Amendment dated Nov. 2, 2001, which has been filed as paper no. 11, have been fully considered but they are not persuasive.

a) *The Applicants argue that their composition is intended to solve an agglutination problem, whereas Regler (DE 41 00 645 A1) does not mention or suggest an agglutination problem. Therefore, one skilled in the art would not make the particular selection from Reglers' compositions, the particular selection which solves a problem that is not mentioned in the Applicants' specification.*

The Applicants' argument is faulty for at least two reasons:

- (i) there is no requirement under 35 USC 103 that the applied reference (in this case, DE 41 00 645 A1 to Regler et al.) has to recognize the problem that the Applicants' invention recognizes and purports to solve in order for the applied reference to be available for use in a 35 USC 102 or 35 USC 103 rejection, in the manner that the Applicants' argument suggests, and
- (ii) the Applicants' selection of particular species from the laundry list of disclosed species of the "alkali and/or alkaline earth compounds" mentioned on pg. 4, 2nd full paragraph in the English translation of DE 41 00 645 A1 is obvious in view of the discussion of the *In re Petering*, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962) court decision set forth in section 2144.08(II)(A)(4)(a) in the MPEP (8th ed.) where it was held that a prior art reference disclosure of a genus containing as many as 20 species (plus variations) inherently anticipated a claimed species within the genus.

b) *The Applicants argue that in order to reconstruct the Applicants' invention from DE 41 00 645 A1, one skilled in the art must operate successive selections.*

The argument is not persuasive for the reasons set forth in the discussion of the *In re Petering* court decision discussed in sub-paragraph (b) in this portion of the Office Action. Also, note that section 2143.02 (1st section) in the MPEP (8th ed.) sets forth that obviousness only needs a reasonable expectation of success.

c) *The Applicants argue that Regler's composition can contain silica (silica is explicitly mentioned among the possible compositions), whereas the Applicants' have discovered the negative effect of silica for the agglutination problem. Specifically, the Applicants' claims recite that the composition is substantially devoid of silica.*

The deletion of silica is obvious since there is nothing in DE 41 00 645 A1 teaching or suggesting the criticality of the presence of silica in their composition, as evinced by the absence of silica is the Example and independent claim 1 disclosed in the English translation of DE 41 00 645 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 703-308-2540. The examiner can normally be reached on 8 hr. days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffen can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Timothy Vanoy/tv


Timothy Vanoy

Dec. 10, 2001

Patent Examiner

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